NAVY AND MARINE CORPS PUBLIC HEALTH CENTER UPDATE

NAVY AND MARINE CORPS PUBLIC HEALTH CENTER
PREVENTION AND PROTECTION START HERE

INSIDE THIS ISSUE

Winter 2014

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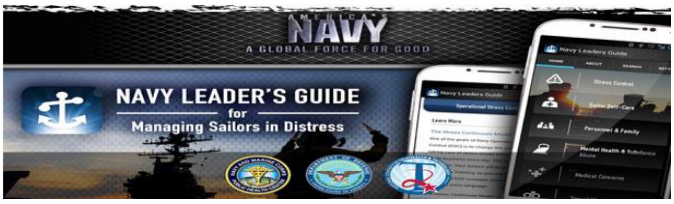
Navy Leader's Guide App Launch

By: NMCPHC Public Affairs



This January NMCPHC released a smart phone application for the Navy Leader's Guide, an online handbook to help Navy leaders recognize and help Sailors displaying distressed behaviors. "As psychological and emotional well-being is a key component of operational and mission readiness, NMCPHC realized there was a need for Navy leaders to have access to this important resource from wherever they were regardless of computer availability," said Cmdr. Connie Scott, NMCPHC HPW department head. "NMCPHC saw the reach and portability of mobile technology and apps as the answer they were looking for and have spent the last year working with T2 to make their vision a reality."

Primarily used by Sailors in supervisory roles to help them identify Sailors who may be in distress, the Navy Leader's Guide provides information on operational stress control, suicide prevention, mental health, medical issues, and common problems that junior Sailors face along with supportive interventions, resources, and strategies as well as guidance for leaders when they are assisting a distressed Sailor.

NMCPHC designed the original online version of the Navy Leader's Guide for Managing Sailors in Distress and partnered with Telehealth and Technology (T2), a component center of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, to develop the mobile app edition for the Navy Leader's Guide. According to Dr. Mark Long, NMCPHC Public Health educator, the app contains resources available in the online version in a format optimized for mobile devices, allowing leaders to take it with them anywhere they go - deployments, training missions, or as a quick resource while on the go in port.

The Navy Leader's Guide app is now available for download on iTunes and Google Play.

From the Commanding Officer's Desk

Welcome to the first issue of the NMCPHC Newsletter for 2014. I wish all of you and your families a healthy and safe New Year. Much was accomplished in 2013, and 2014 looks to be another year of change, challenges and new initiatives. In that regard, the Defense Health Agency continues to take shape. In the weeks and months ahead, I'm hopeful that our role in the Public Health Domain will become clearer. Your patience and quick response to the data calls and taskers is greatly appreciated. Deepak Chopra may have said it best: "All great changes are preceded by chaos." – Deepak Chopra

Capt. Michael J. Macinski
Commanding Officer, NMCPHC

Speaking of change, I'm pleased to announce that CAPT Scott Jonson, MSC has been selected to be the new Commanding Officer for the Navy and Marine Corps Public Health Center. I'm confident that our staff will welcome CAPT Jonson to the NMCPHC family and assist him in his transition from medical research to the world of public health. As the official message is relatively "hot off the press," Change of Command details will be announced in the coming months.

It gives me great pleasure to congratulate our Population Health Directorate for the successful launch of the mobile version of the Navy Leaders Guide for Managing Sailors in Distress, an application that was developed in conjunction with the National Center for Telehealth and Technology (T2). This easy to navigate app allows leaders to recognize distress behaviors and tells them where to get assistance. The future for additional smart phone applications supporting healthy living, occupational illness identification and prevention and so many other areas is just beginning. It's no surprise that smart phones are replacing computers for many of our young Sailors and Marines, and reaching them with technology they are familiar with is needed to continue to get our messages across to this generation of war fighter.

One of our primary strategic objectives for 2014 will be the continued development of state-of-the-art products and services to assure that we're poised to meet the needs of an ever-changing operational environment. Part of that includes building upon the successes of 2013. For example, Navy Environmental Preventive Medicine Unit Six in Hawaii recently provided preventive medical support after the typhoon in the Philippines. Lessons learned are being adapted for future missions to include the "who, how, and when" we deploy, as well as the types of equipment required for the initial site visit. CAPT Dexter Hardy, the Director of Preventive Medicine, and his staff are working closely with the Navy Environmental Preventive Medicine Units (NEPMUs) to develop new procedures, training and equipment sets that will be lighter, quicker to deploy and readily available for multiple operations. Speaking of innovation, our Drug Labs are now testing for synthetic marijuana compounds (e.g., SPICE), a major development in DoD's ability to preserve fleet readiness.

Part of our continued commitment to stakeholders requires feedback. Two-way communication is critical in that regard. In the next several months we will be working with our Fleet, Marine, and Healthcare based customers to get feedback on how we can serve them better.

Teamwork, innovation, and dedication are why NMCPHC is the standard-bearer for ensuring healthier, safer, and more resilient Sailors and Marines. As this may be one of my final newsletters, I want to thank you for your support during my tenure at NMCPHC, and in the words of Mark Twain: "20 years from now you will be more disappointed by the things you didn't do than by the one's you did. So throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover."

VR/CAPT Macinski

CMC Corner

Greetings NMCPHC! I hope that the New Year has started off well and that everyone is getting into the swing of business in 2014. Looking retrospectively at my first six months here as the Command Master Chief, I am continually taken aback by the diversity and complexity of our commands. Our geographical distribution, from Hawaii to Spain, creates one of the most unique challenges throughout BSO 18. I will do my best this year to get to all of the commands I have not had the privilege to visit up to this point.

Nominations are being accepted for the 2014 HMCM Stephen Brown (Preventive Medicine Technician of the Year) Award. Nomination packages will be accepted until 28 February 2014. We look forward to reviewing the packages and hope to build off of the continued success we enjoyed last year with NMCPHC Sailor of the Year (SOY) HM1 Jason Eusebio, from NEPMU Five. HM1 Eusebio continued on and won the regional SOY for BUMED. Though he did not win the overall Navy Medicine Sailor of the Year, no Preventive Medicine Technician, from our enterprise, has competed and been recognized at that level. For more information please refer to the "Alerts" section of the NMCPHC website.

HMCM (SW/EXW) Derek Petrin
Command Master Chief, NMCPHC

As we continue to march into the New Year, let us remember to continue our vigilance on and off duty. So many challenges and road blocks face our Sailors every day. Unfortunately we see these in the news nearly every day. We have to remain vigilant in all aspects of our lives; from the increased awareness of SAPR issues and suicide prevention, to the personal information breach at Target. Our families and our teammates are under constant attack and we need to teach and support a better understanding of situational awareness in these ever-changing times. I truly hope that this message finds you well and I look forward to seeing you soon.

Electronic Prescription Record System (ePRS) Reducing False Positives and Alleviating Additional Drug Testing

By: Cmdr. Eric Welsh

Photo by Photographer's Mate 2nd Class Jim Watson.

Since the Vietnam War era, the Department of Defense has implemented policies to increase force readiness by controlling substance abuse via the Drug Demand Reduction Program (DDRP). The DDRPs conducts urine tests at drug screen laboratories as the primary method for deterring the use of prohibited drugs. As a result of higher scrutiny in addressing prescription drug abuse amongst service members[1][2][3][4], the DDRP testing panel expanded to include new drugs and increased the testing rate for drugs currently on the panel. In particular, in May 2012 the popular pain killers hydrocodone (e.g., Vicodin) and hydromorphone (e.g., Dilaudid) were added to the panel. The testing rate of these and other opioids, such as oxycodone (e.g., Percocet and Percodan), oxymorphone, codeine, and morphine increased from approximately 20 percent to 100 percent by October 2012. In addition, in November 2012 the test panel expanded to include benzodiazepines (e.g., Xanax, Valium, and Ativan) and the testing rate for these drugs ramped up to 100 percent by October 2013.

The DDRP implemented an electronic Prescription Record System (ePRS) DoD-wide in early 2012 to facilitate the addition of prescription drugs to the testing panel. Upon initial screening of a given sample, the preliminary results are automatically compared to the Pharmacy Data Transaction System (PDTS), which contains current prescriptions for service members receiving prescriptions via the TriCare system. The sample is reported as negative if a current prescription is found for the substance detected in the screened result. For example, if the screening indicates the presence of amphetamine and the member has a prescription for Adderall, then the sample is reported as negative. This system alleviates additional testing at the lab as well as administrative and legal workload at the submitting unit, where, by instruction, all positive results require adjudication by the commanding officer.

To further focus testing efforts within the lab, novel screening protocols have been implemented. For several of the drug classes, such as amphetamines and opioids, secondary (adjunct) screening tests are used to add specificity to the initial test. For example, one initial screening test detects both amphetamine and methamphetamine. For this scenario, an adjunct test is used on these samples to discriminate between these types of amphetamines. This allows ePRS to be applied to the amphetamine-only population and further testing to be done on those with methamphetamine and those without a valid prescription. Consequently, this methodology focuses further testing on truly illicit drug use, whether of illegal drugs or misused prescription drugs.

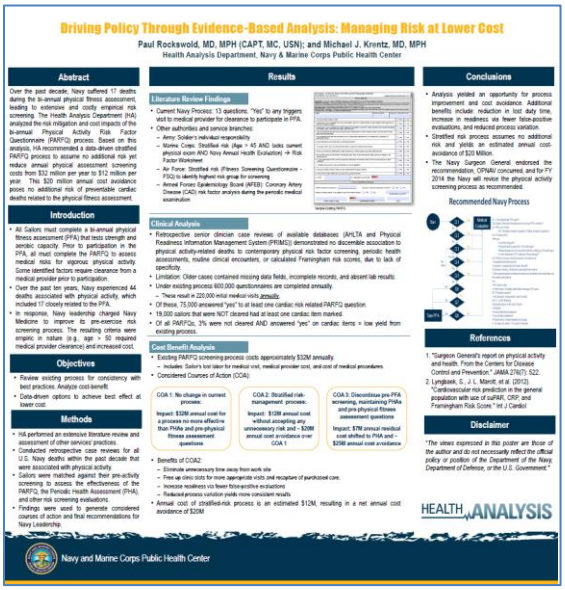
The combination of ePRS and novel testing schemes resulted in the DDRP labs testing for more drugs than ever before with the same resources. The "wash" rates (65-80 percent) from these initiatives allow new drugs to be added to the panel and 100 percent testing rates for all drugs. In addition, much of the burden of adjudicating positive results is removed from the submitting commands since most of these results come from service members with valid prescriptions. These initiatives allow the DDRP labs to expand both testing capability and capacity to enable readiness and force protection by providing timely drug testing results.

Contact Cmdr. Welsh, Laboratory Services Director, for additional information about the Navy drug screening program.

[1] CJCS Memo, "A Systems Approach to Drug Demand Reduction in the Force," 1 November 2010.
[2] Institute of Medicine Report Brief, "Substance Use Disorders in the U.S. Armed Forces," September 2012.
[3] "Military Substance Abuse At 'Crisis' Levels," By Gregg Zoroya, *USA Today*, 18 September 2012
[4] "Report Faults Military's Strategies On Drug And Alcohol Abuse," By James Dao, *New York Times*, 17 September 2012

NMCPHC Joins the National Conversation on Federal Healthcare Transformation

By: Kendyl Work and Dr. Gretchen H. Thompson



Poster: Driving Policy Through Evidence-Based Analysis: Managing Risk at Lower Cost

This past November NMCPHC participated in the Society of Federal Health Professionals (AMSUS) annual conference. This year's conference focused on private and public sector medical partnerships and the future of military healthcare. Conference speakers emphasized the need for collaboration across medical sectors to share best practices and improve healthcare driven by evidence-based strategies. Presentations on the future organization of federal healthcare revealed that leaders and policy makers are committed to achieving an integrated, collaborative model across sectors. Experts reiterated throughout the conference the value in maximizing data-driven insights and sharing evidence-based practices to address medical challenges such as: disaster preparedness, healthcare quality assurance, patient safety, pain management, and resource allocation.

Representatives from NMCPHC's Health Analysis Department presented the following innovative projects during the conference:

- Long-Acting Reversible Contraception (LARC) vs. Non-LARC use by Active Duty Female Sailors and Marines
- Beyond Data: Empowering Myasthenia Gravis Patients and their Providers to Manage Risk and Improve Healthcare
- Driving Policy Through Evidence-Based Analysis: Managing Risk at Lower Cost
- Utilization of Targeted Communication Strategies to Reduce Risk for Pediatric Adenotonsillectomy Patients Receiving Post-Operative Codeine
- Unnecessary Medical Procedures: Antibiotic Prescription for Viral Respiratory Illness
- Cough and Cold Medications Prescribed for Respiratory Illnesses in Children Under Four Years of Age among DOD Beneficiaries, CY 2008-2012

The collection of projects presented at the conference resonated with participants from across all sectors of public and private healthcare. Many participants were interested in the clinical pathways, medical guidelines, involved in subjects analyzed. Additionally the data trends and reports were also interesting to many people, prompting questions and interest in the techniques used and the data assessed. NMCPHC delegates networked extensively throughout the conference to establish a database of contacts for future collaboration. Networks established during the meeting will increase NMCPHC's footprint within the federal medical sector and communicate the command's capabilities to its customers.

Contact Capt. Rockswold, Health Analysis Department Head, for additional information about this year's AMSUS conference.

Health Promotion and Wellness Resources to Reduce Short-Term Comorbid Risks among Wounded, Ill, and Injured Sailors and Marines with Traumatic Amputations

By: Ruth Greene and Diana Fitzgerald

Photo by Mass Communication Specialist 2nd Class Chad A. Bascom

New Report for WII Service Members

In the continued effort to provide evidence-based resources to WII service members, the NMCPHC Health Promotion and Wellness (HPW) Department and the EpiData Center (EDC) released a report that studies health encounters experienced by Wounded, Ill, and Injured (WII) Sailors and Marines with traumatic amputations.

How Does it help?

The purpose of this assessment is to identify HPW resources that could be used during the acute phase of treatment and rehabilitation of WII members for preventable chronic diseases. “Due to advanced lifesaving medical treatment now available, many traumatic amputations require both short- and long-term rehabilitation efforts. We must focus on WII amputees, their specific health challenges, and the barriers they face in returning to optimal well-being." said Cmdr. Connie Scott, HPW Department Head.

Report Findings

The report revealed that major-limb traumatic amputations comprise more than 1,700 injuries for service members from 2001-2012. Additionally, literature and epidemiologic surveillance data of WII members shows trends of increased care for behavioral health, along with referrals for nutrition counseling and tobacco cessation.

HPW Strategy for Early Phase of Recovery

- Learn new stress management skills and behavior change strategies
- Cease any smoking or excessive alcohol intake
- Exercise nutritious eating habits to maintain a healthy weight
- Follow a comprehensive physical activities plan

Resources to Use

The HPW Department designed several resources to guide WII service members and their families through their recovery.

- Life After an Amputation
- Nutrition
- Navigating Stress
- Post-Traumatic Stress Disorder (PTSD)
- Tobacco Cessation
- Substance Abuse

For more information on this subject and to read the report, go to:
http://www.med.navy.mil/sites/nmcphc/health-promotion/Pages/default.aspx

Ensuring the Health and Safety of Operational Forces in the Philippines

By: Lt. Cmdr. Chadwick Yasuda

Navy Environmental and Preventive Medicine Unit-6 staff (from left to right), Hospital Corpsman 2nd Class Victor Torrico, Hospital Corpsman 2nd Class Elmer Lacanilao, and Chief Hospital Corpsman Travis Longacre complete their support of Operation Damayan following a base camp assessment of the 3rd Marine Expeditionary Brigade camp in Tacloban."

A seven-person preventive medicine team from the Navy Environmental and Preventive Medicine Unit Six (NEPMU-6) returned Nov. 27, after spending nine days deployed to the Philippines in support of Operation Damayan. The team focused on force health protection for members of U.S. Joint Task Force 505, established to run Operation Damayan in the wake of Typhoon Yolanda, the deadliest storm to hit the Philippines in recorded history.

The Pearl Harbor-based unit of NMCPHC deployed to assess, prevent, and control public health threats to operational forces already in place. The team, consisting of experts in preventive medicine, entomology, and environmental health, provided assessments on the four temporary camps where U.S. forces worked: Tacloban, Ormoc, Guiuan, and Borongan. Located in the hard-hit central Philippine provinces of Leyte and Eastern Samar, these airports served as logistics and transportation hubs for the international relief effort.

"We hit the ground running," said Lt. Cmdr. Brye Roberts, Officer in Charge, "This was a non-combat theater, but for us the mission is the same - to ensure the health and safety of DoD assets on the ground and to prevent the spread of disease."

In a tropical country like the Philippines, potentially deadly infections like malaria and dengue fever are a constant concern. U.S. service members are often unfamiliar with these disease threats therefore NEPMU-6 started its work by empowering the service members through education.

"A large part of our activities include educating forces on methods of personal protection," said Lt. Jon Winchester, NEPMU-6 entomologist, "This training includes education on using DEET and mosquito netting properly, policing camps of trash and structures where mosquitoes can breed, and interfacing with local and non-governmental organization (NGO) medical networks to be aware of vector-borne diseases in the local population."

NEPMU-6 provided some of this education to many of the involved units/commands prior to this deployment. Last year, NEPMU-6 deployed team members to Okinawa to provide training on sanitation and field pest management. This training benefitted preventive medicine technicians from the Okinawa-based 3rd Marine Logistics Group, who were on site at Tacloban with the first wave of Marines.

According to Winchester, the Marines' corpsmen did a great job looking out for public health concerns under very tough circumstances. “We provided them training less than a year ago, discussing in theory some of these exact same situations, and now here we are in reality after a natural disaster," said Lt. Winchester.

“For the NEPMU-6 personnel, the short deployment was a great learning experience,” said Hospital Corpsman, 2nd Class, Victor Torrico, NEPMU-6 preventive medicine technician (PMT), "I am really grateful for the opportunity to help a country in need. As a Sailor, Corpsman, and PMT, I felt I left a positive, lasting impact on the inhabitants of the Philippines."

Though diseases common in the Southeast Asia and the Pacific might not be familiar to people living in the U.S., NMCPHC provides policy and guidance that our service members can follow to minimize their health risk when overseas. Specialized teams like NEPMU-6 communicate and implement these messages in a challenging environment like Operation Damayan so that Sailors and Marines avoid getting sick and provide uninterrupted, effective support to the affected people of the Philippines as they recover from this devastating disaster.

Population Health Directorate's Departments Collaborate to Support NMCPHC's "Protection through Prevention" Strategic Vision

By: Kendyl Work and Dr. Gretchen H. Thompson

Photo by Mass Communication Specialist 2nd Class Timothy Walter

The Population Health (PH) Directorate of NMCPHC optimizes force health protection and readiness for the Department of the Navy (DON) through epidemiologic surveillance, clinical health analysis, and evidence-based health promotion and wellness programs. The Directorate supports the full spectrum of Navy Medicine's public health imperative through data-driven, population-oriented analyses, practices, and outreach programs. There are three departments in PH:

- **EpiData Center (EDC)** provides epidemiologic services in support of the Navy's public health programs;
- **Health Analysis (HA)** provides expertise and leadership to improve the value of Navy health care and operational readiness through clinical health analysis, epidemiologic principles, and evidence-based methods;
- **Health Promotion and Wellness (HPW)** provides innovative and evidence-based health promotion and wellness programs and services that facilitate readiness and resilience, prevent illness and injury, hasten recovery, and promote lifelong healthy behaviors and lifestyles.

Collaboration across PH departments promotes the seamless integration of sophisticated data analysis with targeted health promotion strategies to deliver programs relevant to real world settings. Together, the integrated PH Directorate supports NMCPHC's strategic vision to promote *"protection through prevention."*

PH has conducted a number of collaborative projects to date. For example, in a study on the importance of sleep to protect mental health and support operational readiness, analysts in HA found nearly 30,000 Sailors and Marines suffer from sleep disorders. These disorders could contribute to mental health illnesses such as depression, post-traumatic stress disorder, and an increased risk of suicide. HPW leveraged the HA report to create products such as webinars, web articles, and informational CDs to promote good sleep hygiene for Sailors and Marines and protect their mental health. In another study, EDC conducted an epidemiologic surveillance of Sailors and Marines who experienced traumatic amputations to identify associated comorbid risks such as anxiety, post-traumatic stress disorder, tobacco and substance use disorders, and metabolic disorders. Using the EDC report, HPW developed a report to highlight available resources that aid caregivers, promote successful recovery, and mitigate and prevent complications associated with traumatic amputations.

All three departments have worked together to develop actionable solutions for complex, high profile public health projects. Experts from across EDC, HA, and HPW joined a multi-disciplinary task force to conduct in-depth, retrospective suicide case reviews of Sailors and Marines, resulting in 18 recommendations on how to minimize stressors and improve suicide prevention efforts throughout the Navy and Marine Corps. The three departments are also working together to perform comprehensive analyses and develop scientific reports on drug use and misuse across the Navy and Marine Corps to guide policies for the Secretary of the Navy.

PH's data-driven and action-based approach provides a dynamic and versatile capability for the Navy and Marine Corps. The Directorate's products result in programs and resources that promote the health of Sailors and Marines and support force readiness. The integral partnership among the three PH departments creates a sustaining impact and drives innovative collaboration between population health analyses and outreach programs. The Directorate's work benefits service members at risk of developing a number of health-related issues in the course of their active duty careers and is fundamental in supporting force health readiness.

Leptospirosis: A Preventable Infection Common Throughout Hawaii

Article courtesy of the Ho'okele.

Photo by Naval Health Clinic Hawaii

Living in Hawaii affords many military personnel, family members, and visitors the opportunity to enjoy some of the most beautiful hiking trails in the country. Many of these trails offer scenic fresh waterfalls and inviting swimming ponds. However, many of these freshwater ponds contain dangerous bacteria called leptospira. Leptospirosis is a bacterial disease primarily carried by rats and mice, although dogs, pigs, cattle, and horses can also become infected. The disease is generally transmitted to humans by exposure to fresh water streams or ponds contaminated with urine from infected animals. Infection can take place when contaminated water enters the body through the mouth, nose, eyes, or open wounds.

Each year, the Hawaii Department of Health (DOH) monitors reported cases of leptospirosis, and health officials are encouraging people to take preventive measures. Historically, two-thirds of Hawaii's leptospirosis cases occur during the warmer months, when there is increased outdoor activity and more people swim in these fresh water streams or ponds. Cases have recently increased with most of the cases coming from the Island of Hawaii, the Big Island, and it is believed that many cases are not reported.

Of the cases reported on Oahu, most come from Maunawili Falls. Several active duty service members were suspected of having leptospirosis and received care at Tripler Army Medical Center over the past several months. These members became infected by swimming in fresh water ponds along popular Oahu hiking trails.

Individuals who develop flu-like symptoms (high fever, severe headaches, muscle aches, nausea, and vomiting) and were exposed to fresh water streams, ponds, or mud during the preceding three weeks should immediately seek medical attention and inform them of any environmental exposures and skin wounds. Left untreated, those infected may develop kidney, liver, blood, and nervous system damage and in rare cases, death may occur.

Preventing Impaired Driving

By: Kristina MacKenzie


Photo by Mass Communications Specialist 3rd Class Terah L. Mollise

In the 2012 Fleet and Marine Corps Health Risk Assessment Annual Report, 22 percent of respondents (including active duty and reserve Sailors and Marines) indicated they engaged in heavy drinking, and four percent indicated they had driven after having too much to drink[5]. While four percent may not seem like a high number, no one should be driving when they have had too much to drink given the risks of accident, injury and death. In 2010, males aged 21-34 comprised 11 percent of the U.S. adult population, but were responsible for 32 percent of all instances of drinking and driving[6]. A large number of our active duty members fall into this same population group who are drinking and driving. NMCPHC and the HPW Department are committed to providing Sailors and Marines with the tools they need to drink responsibly, use prescription medications safely, and prevent impaired driving.

As part of an effort to prevent impaired driving in the new year, Dr. Mark Long of NMCPHC's HPW

[5] Navy and Marine Corps Public Health Center. EpiData Center Department. Fleet and Marine Corps Health Risk Assessment Annual Report, 2012.http://www.med.navy.mil/sites/nmcphc/Documents/health-promotion-wellness/general-tools-and-programs/HRA/HRA2012_FINAL.pdf. Prepared April 2013. Accessed October 2013.

[6] Centers for Disease Control and Prevention. Drinking and Driving: A Threat to Everyone. Vital Signs October 2011. http://www.cdc.gov/vitalsigns/DrinkingAndDriving/. Updated 3 October 2011. Accessed October 2013.

Department along with Mike Aukerman and Lanorfeia Parker of the Navy Alcohol and Drug Abuse Prevention (NADAP) co-authored an article to help your Sailors and Marines make responsible choices and get home safely this year. You can read the full article and share this message with your Sailors and Marines, by visiting NMCPHC's HPW reproducible materials page. While you are there you can also check out HPW's other recent articles on such important health topics as tobacco cessation, maintaining psychological readiness, and maintaining a healthy diet.

To learn more about how HPW's programs can help keep your service members fit for service and improve overall health, please visit the HPW Web Page.

Senior Sailor of the Year 2013

Please take the time to congratulate these great Sailors on making a significant impact at their commands and throughout the Navy.

U.S. Navy Bureau of Medicine and Surgery (BUMED) Senior Sailor of the Year:
NEPMU-5 – HM1 (FMF/NAC/AW) Jason Eusebio

Enterprise Senior Sailors of the Year 2013:
NEPMU-2 – HM1 MORENO
NEPMU-6 – HM1 SLAUGHTER
NDC – HM1 CHARLES
NECE – HM1 SPATOLA

Promotions

The following personnel have been promoted to the following listed ranks. Congratulations!

NDC
HM1 Jones
HM3 Harris

NEPMU-2
HM2 Jason Ramirez

NEPMU-5
HM3 Calderone

NEPMU-6
HM3 Meosha Williams